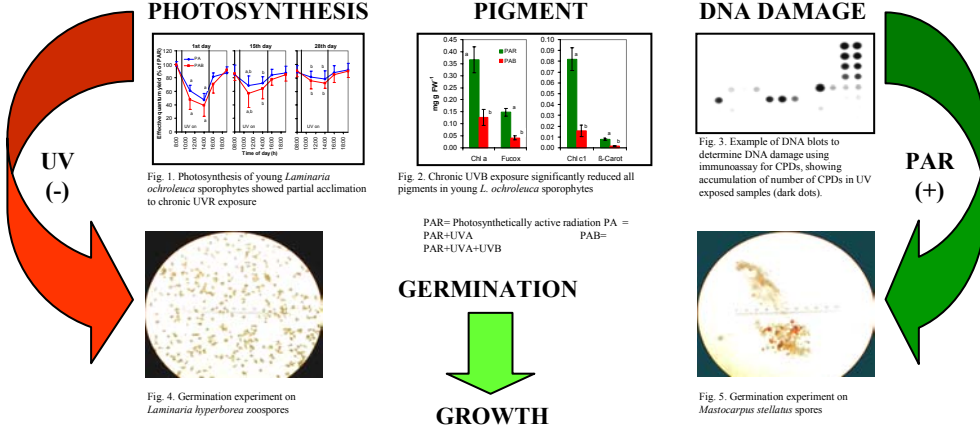




SCIENTIFIC QUESTION:

How does UV radiation affects growth, as an integrative parameter of all physiological processes, in determining distribution pattern of macroalgae and its impact on recruitment in nearshore ecosystems ?



LABORATORY INCUBATION SYSTEM 1

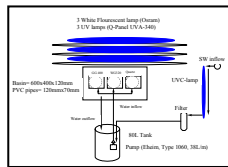


Fig. 6. Flow-through basin incubation system installed inside a temperature controlled room.

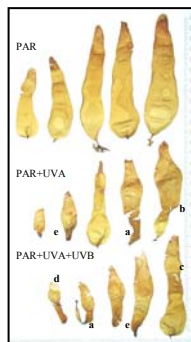


Fig. 8. Morphological responses of *Laminaria ochroleuca* after 28 days UVR exposure include: (a) tissue deformation; (b) lesion; (c) blistering; (d) bleaching and (e) thickening of the meristematic lamina.

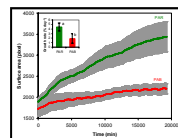


Fig. 9. Growth rate of *L. ochroleuca* measured in the growth chamber using a video image analysis software (MedeaLAB™).

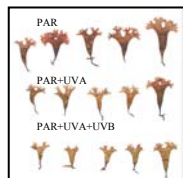


Fig. 10. Effects of UVR on *Chondrus crispus* include lower growth rate and thallus bleaching.

LABORATORY INCUBATION SYSTEM 2 Growth Chamber with Automated Online Video Measuring Technique



Fig. 7. ISITE™ growth chamber showing: (a) camera control panel; (b) CCD camera; (c) timer; (d) sliding platform; (e) lamps; (f) infrared diodes; (g) UV transparent Plexiglas chamber; (h) cut-off filter glasses; (i) PC; (j) water reservoir; (k) water inflow and (l) water outflow.

RECRUITMENT ?

